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## RAW SEQUENCE LISTING

DATE: 03/03/2004

PATENT APPLICATION: US/10/032,376A

TIME: 15:09:23

Input Set : A:\1443008US1.txt

Output Set: N:\CRF4\03022004\J032376A.raw

4 <110> APPLICANT: Quirk, Steven  
6 <120> TITLE OF INVENTION: Metalloproteinase Inhibitors for Wound Healing  
8 <130> FILE REFERENCE: 1443.008US1  
10 <140> CURRENT APPLICATION NUMBER: US 10/032,376A  
11 <141> CURRENT FILING DATE: 2001-12-21  
13 <150> PRIOR APPLICATION NUMBER: 60/312,726  
14 <151> PRIOR FILING DATE: 2001-08-16  
16 <160> NUMBER OF SEQ ID NOS: 20  
18 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
20 <210> SEQ ID NO: 1  
21 <211> LENGTH: 8  
22 <212> TYPE: PRT  
23 <213> ORGANISM: Homo sapiens  
25 <400> SEQUENCE: 1  
26 Pro Arg Cys Gly Val Pro Asp Val  
27 1 5  
29 <210> SEQ ID NO: 2  
30 <211> LENGTH: 44  
31 <212> TYPE: PRT  
32 <213> ORGANISM: Homo sapiens  
34 <400> SEQUENCE: 2  
35 Met Gln Lys Phe Phe Gly Leu Pro Gln Thr Gly Asp Leu Asp Gln Asn  
36 1 5 10 15  
37 Thr Ile Glu Thr Met Arg Lys Pro Arg Cys Gly Asn Pro Asp Val Ala  
38 20 25 30  
39 Asn Tyr Asn Phe Phe Pro Arg Lys Pro Lys Trp Asp  
40 35 40  
42 <210> SEQ ID NO: 3  
43 <211> LENGTH: 50  
44 <212> TYPE: PRT  
45 <213> ORGANISM: Homo sapiens  
47 <400> SEQUENCE: 3  
48 Met Gln Ser Phe Phe Gly Leu Glu Val Thr Gly Lys Leu Asp Asp Asn  
49 1 5 10 15  
50 Thr Leu Asp Val Met Lys Lys Pro Arg Cys Gly Val Pro Asp Val Gly  
51 20 25 30  
52 Glu Tyr Asn Val Phe Pro Arg Thr Leu Lys Trp Ser Lys Met Asn Leu  
53 35 40 45  
54 Thr Tyr  
55 50  
57 <210> SEQ ID NO: 4  
58 <211> LENGTH: 56  
59 <212> TYPE: PRT

ENTERED

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60 <213> ORGANISM: Homo sapiens
62 <400> SEQUENCE: 4
63 Met Gln Lys Phe Phe Gly Leu Pro Glu Thr Gly Lys Leu Ser Pro Arg
64 1 5 10 15
65 Val Met Glu Ile Met Gln Lys Pro Arg Cys Gly Val Pro Asp Val Ala
66 20 25 30
67 Glu Phe Ser Leu Met Pro Asn Ser Pro Lys Trp His Ser Arg Thr Val
68 35 40 45
69 Thr Tyr Arg Ile Val Ser Tyr Thr
70 50 55
72 <210> SEQ ID NO: 5
73 <211> LENGTH: 54
74 <212> TYPE: PRT
75 <213> ORGANISM: Homo sapiens
77 <400> SEQUENCE: 5
78 Met Gln Lys Phe Leu Gly Leu Glu Val Thr Gly Lys Leu Asp Ser Asp
79 1 5 10 15
80 Thr Leu Glu Val Met Arg Lys Pro Arg Cys Gly Val Pro Asp Val Gly
81 20 25 30
82 His Phe Arg Thr Phe Pro Gly Ile Pro Lys Trp Arg Lys Thr His Leu
83 35 40 45
84 Thr Tyr Arg Ile Val Asn
85 50
87 <210> SEQ ID NO: 6
88 <211> LENGTH: 55
89 <212> TYPE: PRT
90 <213> ORGANISM: Homo sapiens
92 <400> SEQUENCE: 6
93 Met Gln Lys Phe Leu Gly Leu Glu Val Thr Gly Lys Leu Asp Thr Asp
94 1 5 10 15
95 Thr Leu Glu Val Met Arg Lys Pro Arg Cys Gly Val Pro Asp Val Gly
96 20 25 30
97 His Phe Ser Ser Phe Pro Gly Met Pro Lys Trp Arg Lys Thr His Leu
98 35 40 45
99 Thr Tyr Arg Ile Val Asn Tyr
100 50 55
102 <210> SEQ ID NO: 7
103 <211> LENGTH: 54
104 <212> TYPE: PRT
105 <213> ORGANISM: Homo sapiens
107 <400> SEQUENCE: 7
108 Met Gln His Phe Leu Gly Leu Lys Val Thr Gly Gln Leu Asp Thr Ser
109 1 5 10 15
110 Thr Leu Glu Met Met His Ala Pro Arg Cys Gly Val Pro Asp Val His
111 20 25 30
112 His Phe Arg Glu Met Pro Gly Gly Pro Val Trp Arg Lys His Tyr Ile
113 35 40 45
114 Thr Tyr Arg Ile Asn Asn
115 50

```

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117 <210> SEQ ID NO: 8
118 <211> LENGTH: 47
119 <212> TYPE: PRT
120 <213> ORGANISM: Homo sapiens
122 <400> SEQUENCE: 8
123 Leu Gln Lys Gln Leu Ser Leu Pro Glu Thr Gly Glu Leu Asp Ser Ala
124 1 5 10 15
125 Thr Leu Lys Ala Met Arg Thr Pro Arg Cys Gly Val Pro Asp Leu Gly
126 20 25 30
127 Arg Phe Gln Thr Phe Glu Gly Asp Leu Lys Trp His His Asn
128 35 40 45
130 <210> SEQ ID NO: 9
131 <211> LENGTH: 54
132 <212> TYPE: PRT
133 <213> ORGANISM: Homo sapiens
135 <400> SEQUENCE: 9
136 Met Gln Glu Phe Phe Gly Leu Lys Val Thr Gly Lys Pro Asp Ala Glu
137 1 5 10 15
138 Thr Leu Lys Val Met Lys Gln Pro Arg Cys Gly Val Pro Asp Val Ala
139 20 25 30
140 Gln Phe Val Leu Thr Glu Gly Asn Pro Arg Trp Glu Gln Thr His Leu
141 35 40 45
142 Thr Tyr Arg Ile Glu Asn
143 50
145 <210> SEQ ID NO: 10
146 <211> LENGTH: 55
147 <212> TYPE: PRT
148 <213> ORGANISM: Homo sapiens
150 <400> SEQUENCE: 10
151 Met Gln Arg Phe Phe Gly Leu Asn Val Thr Gly Lys Pro Asn Glu Glu
152 1 5 10 15
153 Thr Leu Asp Met Met Lys Lys Pro Arg Cys Gly Val Pro Asp Ser Gly
154 20 25 30
155 Gly Phe Met Leu Thr Pro Gly Asn Pro Lys Trp Glu Arg Thr Asn Leu
156 35 40 45
157 Thr Tyr Arg Ile Arg Asn Tyr
158 50 55
160 <210> SEQ ID NO: 11
161 <211> LENGTH: 19
162 <212> TYPE: PRT
163 <213> ORGANISM: Homo sapiens
165 <400> SEQUENCE: 11
166 Pro Arg Cys Gly Asn Pro Asp Val Ala Asn Tyr Asn Phe Phe Pro Arg
167 1 5 10 15
168 Lys Pro Lys
171 <210> SEQ ID NO: 12
172 <211> LENGTH: 9
173 <212> TYPE: PRT
174 <213> ORGANISM: Homo sapiens

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Input Set : A:\1443008US1.txt

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```

176 <400> SEQUENCE: 12
177 Pro Arg Cys Gly Asn Pro Asp Val Ala
178 1 5
180 <210> SEQ ID NO: 13
181 <211> LENGTH: 10
182 <212> TYPE: PRT
183 <213> ORGANISM: Homo sapiens
185 <400> SEQUENCE: 13
186 Asn Tyr Asn Phe Phe Pro Arg Lys Pro Lys
187 1 5 10
189 <210> SEQ ID NO: 14
190 <211> LENGTH: 660
191 <212> TYPE: PRT
192 <213> ORGANISM: Homo sapiens
194 <400> SEQUENCE: 14
195 Met Glu Ala Leu Met Ala Arg Gly Ala Leu Thr Gly Pro Leu Arg Ala
196 1 5 10 15
197 Leu Cys Leu Leu Gly Cys Leu Leu Ser His Ala Ala Ala Ala Pro Ser
198 20 25 30
199 Pro Ile Ile Lys Phe Pro Gly Asp Val Ala Pro Lys Thr Asp Lys Glu
200 35 40 45
201 Leu Ala Val Gln Tyr Leu Asn Thr Phe Tyr Gly Cys Pro Lys Glu Ser
202 50 55 60
203 Cys Asn Leu Phe Val Leu Lys Asp Thr Leu Lys Lys Met Gln Lys Phe
204 65 70 75 80
205 Phe Gly Leu Pro Gln Thr Gly Asp Leu Asp Gln Asn Thr Ile Glu Thr
206 85 90 95
207 Met Arg Lys Pro Arg Cys Gly Asn Pro Asp Val Ala Asn Tyr Asn Phe
208 100 105 110
209 Phe Pro Arg Lys Pro Lys Trp Asp Lys Asn Gln Ile Thr Tyr Arg Ile
210 115 120 125
211 Ile Gly Tyr Thr Pro Asp Leu Asp Pro Glu Thr Val Asp Asp Ala Phe
212 130 135 140
213 Ala Arg Ala Phe Gln Val Trp Ser Asp Val Thr Pro Leu Arg Phe Ser
214 145 150 155 160
215 Arg Ile His Asp Gly Glu Ala Asp Ile Met Ile Asn Phe Gly Arg Trp
216 165 170 175
217 Glu His Gly Asp Gly Tyr Pro Phe Asp Gly Lys Asp Gly Leu Leu Ala
218 180 185 190
219 His Ala Phe Ala Pro Gly Thr Gly Val Gly Gly Asp Ser His Phe Asp
220 195 200 205
221 Asp Asp Glu Leu Trp Thr Leu Gly Glu Gly Gln Val Val Arg Val Lys
222 210 215 220
223 Tyr Gly Asn Ala Asp Gly Glu Tyr Cys Lys Phe Pro Phe Leu Phe Asn
224 225 230 235 240
225 Gly Lys Glu Tyr Asn Ser Cys Thr Asp Thr Gly Arg Ser Asp Gly Phe
226 245 250 255
227 Leu Trp Cys Ser Thr Thr Tyr Asn Phe Glu Lys Asp Gly Lys Tyr Gly
228 260 265 270

```

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DATE: 03/03/2004

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TIME: 15:09:23

Input Set : A:\1443008US1.txt

Output Set: N:\CRF4\03022004\J032376A.raw

```

229 Phe Cys Pro His Glu Ala Leu Phe Thr Met Gly Gly Asn Ala Glu Gly
230      275      280      285
231 Gln Pro Cys Lys Phe Pro Phe Arg Phe Gln Gly Thr Ser Tyr Asp Ser
232      290      295      300
233 Cys Thr Thr Glu Gly Arg Thr Asp Gly Tyr Arg Trp Cys Gly Thr Thr
234 305      310      315      320
235 Glu Asp Tyr Asp Arg Asp Lys Lys Tyr Gly Phe Cys Pro Glu Thr Ala
236      325      330      335
237 Met Ser Thr Val Gly Gly Asn Ser Glu Gly Ala Pro Cys Val Phe Pro
238      340      345      350
239 Phe Thr Phe Leu Gly Asn Lys Tyr Glu Ser Cys Thr Ser Ala Gly Arg
240      355      360      365
241 Ser Asp Gly Lys Met Trp Cys Ala Thr Thr Ala Asn Tyr Asp Asp Asp
242      370      375      380
243 Arg Lys Trp Gly Phe Cys Pro Asp Gln Gly Tyr Ser Leu Phe Leu Val
244 385      390      395      400
245 Ala Ala His Glu Phe Gly His Ala Met Gly Leu Glu His Ser Gln Asp
246      405      410      415
247 Pro Gly Ala Leu Met Ala Pro Ile Tyr Thr Tyr Thr Lys Asn Phe Arg
248      420      425      430
249 Leu Ser Gln Asp Asp Ile Lys Gly Ile Gln Glu Leu Tyr Gly Ala Ser
250      435      440      445
251 Pro Asp Ile Asp Leu Gly Thr Gly Pro Thr Pro Thr Leu Gly Pro Val
252      450      455      460
253 Thr Pro Glu Ile Cys Lys Gln Asp Ile Val Phe Asp Gly Ile Ala Gln
254 465      470      475      480
255 Ile Arg Gly Glu Ile Phe Phe Phe Lys Asp Arg Phe Ile Trp Arg Thr
256      485      490      495
257 Val Thr Pro Arg Asp Lys Pro Met Gly Pro Leu Leu Val Ala Thr Phe
258      500      505      510
259 Trp Pro Glu Leu Pro Glu Lys Ile Asp Ala Val Tyr Glu Ala Pro Gln
260      515      520      525
261 Glu Glu Lys Ala Val Phe Phe Ala Gly Asn Glu Tyr Trp Ile Tyr Ser
262      530      535      540
263 Ala Ser Thr Leu Glu Arg Gly Tyr Pro Lys Pro Leu Thr Ser Leu Gly
264 545      550      555      560
265 Leu Pro Pro Asp Val Gln Arg Val Asp Ala Ala Phe Asn Trp Ser Lys
266      565      570      575
267 Asn Lys Lys Thr Tyr Ile Phe Ala Gly Asp Lys Phe Trp Arg Tyr Asn
268      580      585      590
269 Glu Val Lys Lys Lys Met Asp Pro Gly Phe Pro Lys Leu Ile Ala Asp
270      595      600      605
271 Ala Trp Asn Ala Ile Pro Asp Asn Leu Asp Ala Val Val Asp Leu Gln
272      610      615      620
273 Gly Gly Gly His Ser Tyr Phe Phe Lys Gly Ala Tyr Tyr Leu Lys Leu
274 625      630      635      640
275 Glu Asn Gln Ser Leu Lys Ser Val Lys Phe Gly Ser Ile Lys Ser Asp
276      645      650      655
277 Trp Leu Gly Cys

```

RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 03/03/2004  
PATENT APPLICATION: US/10/032,376A      TIME: 15:09:24

Input Set : A:\1443008US1.txt  
Output Set: N:\CRF4\03022004\J032376A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:18; Xaa Pos. 2,5,8,9,11,12,13,18,21,22,23,24,25,26,28,29,30,31  
Seq#:19; Xaa Pos. 5,8,9,10,11,12,13,14,15,16,17,18,19  
Seq#:20; Xaa Pos. 2,5,8,9,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26  
Seq#:20; Xaa Pos. 27,28,29,30,31,32

## VERIFICATION SUMMARY

DATE: 03/03/2004

PATENT APPLICATION: US/10/032,376A

TIME: 15:09:24

Input Set : A:\1443008US1.txt

Output Set: N:\CRF4\03022004\J032376A.raw

L:327 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:331 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:335 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:339 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:343 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:347 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:351 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:355 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:359 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:363 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:367 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:371 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:375 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:379 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:383 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:387 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:391 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:395 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:399 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18  
L:400 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0  
M:341 Repeated in SeqNo=18  
L:413 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:417 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19  
L:421 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19  
L:425 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19  
L:429 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19  
L:433 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19  
L:437 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19  
L:441 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19  
L:445 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19  
L:449 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19  
L:453 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19  
L:457 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19  
L:461 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19  
L:465 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19  
L:466 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
M:341 Repeated in SeqNo=19  
L:479 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:483 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:487 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:491 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:495 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:499 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:503 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:507 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:511 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:515 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:519 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20

**VERIFICATION SUMMARY**

DATE: 03/03/2004

PATENT APPLICATION: **US/10/032,376A**

TIME: 15:09:24

Input Set : **A:\1443008US1.txt**Output Set: **N:\CRF4\03022004\J032376A.raw**

L:523 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:527 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:531 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:535 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:539 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:543 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:547 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:551 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:555 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
L:584 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0  
M:341 Repeated in SeqNo=20